

WHAT IS CLAIMED IS:

1. A method of planning a production schedule, which is useful for a semiconductor foundry, comprising:

Entering a demand of a sales order made by a client, wherein the product is not
5 subject to a backend process;

Searching for the available products in the semiconductor foundry; and

Comparing the demand of the sales order with the available products and taking the smaller one as the supply for the sales order.

2. A method of planning a production schedule, comprising:

10 Entering a demand of a sales order made by a client, wherein the product is subject to a backend process;

Subtracting available product in the warehouse from the demand of the sales order, and obtaining a balanced amount of the product which is still required;

15 Searching for the supplied amount of the wafers that can be provided from the semiconductor foundry and searching for the CTP capacity available for the backend process;

Comparing the supplied amount of the wafer that can be provided from the semiconductor foundry with the CTP capacity available for the backend process,

and taking the smaller one as the supply for the balanced amount of the product; and

Adding the available products in the warehouse to the balanced amount of the product, and obtaining a total amount of the product as the supply for the sales order.

3. The method of planning a production schedule of claim 2, wherein the supplied
5 amount of the wafer that can be provided from the semiconductor foundry includes the
wafers in production, predetermined amount of wafer for specific clients and ATP
(Available To Promise) amount of wafer supplied by the semiconductor foundry.

4. The method of planning a production schedule of claim 3, wherein searching for the
supplied amount of the product that can be provided from the semiconductor foundry is
10 achieved by searching the amount of wafer in production, the predetermined amount of
wafer for specific clients and the ATP amount of wafer.

5. The method of planning a production schedule of claim 3, wherein the ATP amount
of wafer supplied by the semiconductor foundry is offered to the specific clients in case of
overloaded demand and/or to non-specific clients.

15 6. A method of planning a production schedule in a semiconductor foundry,
comprising:

entering a first sales order made by a client A, wherein a product in the first sales
order needs to be subject to the backend process;

subtracting available product in a first warehouse from the demand of the first sales
20 order, and obtaining a first balanced amount of the product which is still required;

searching for the CTP capacity for the backend process and in turn searching for a first supplied amount of the wafer that can be provided from the semiconductor foundry;

comparing the supplied amount of the wafer that can be provided from the semiconductor foundry with the CTP capacity for the backend process, and taking the smaller one as the first balanced amount of the product; and

adding the available products in the first warehouse to the balanced amount of the product, and obtaining a total amount of the product as the supply for the first sales order;

entering a second sales order made by a client B, wherein the product in the second sales order needs to be subject to the same process as the first sales order;

subtracting available products in a second warehouse from the demand of the second sales order, and obtaining a second balanced amount of the product which is still required;

searching for the remaining CTP capacity available for the backend process and searching for a second supplied amount of the wafer that can be provided from the semiconductor foundry, wherein the remaining CTP capacity available for the backend process is obtained by subtracting the first balanced amount of the product from the CTP capacity available for the backend process;

comparing the second supplied amount of the wafer with the remaining CTP capacity, and taking the smaller one as the second balanced amount of the product; and

adding the available products in the second warehouse to the second balanced amount of the product, and obtaining a total amount of the product as the supply for the

second sales order.

7. The method of planning a production schedule of claim 6, wherein the first supplied amount of the product that can be provided from the semiconductor foundry includes the wafers in production for the client A, a predetermined amount of wafer for specific clients and ATP amount of wafer.

8. The method of planning a production schedule of claim 7, wherein the ATP amount of wafer supplied by the semiconductor foundry is offered to the specific clients for overloaded demand and/or to non-specific clients.

9. The method of planning a production schedule of claim 7, wherein searching for the first supplied amount of the product that can be provided from the semiconductor foundry is achieved by searching the amount of wafer in production for the client A, the predetermined amount of wafer for specific clients and the ATP amount of wafer.

10. The method of planning a production schedule of claim 7, wherein the seconds supplied amount of the wafer that can be provided from the semiconductor foundry includes the wafers in production for the client B, a predetermined amount of wafer for specific clients and an ATP amount of wafer.

11. The method of planning a production schedule of claim 10, wherein searching for the second supplied amount of the product that can be provided from the semiconductor foundry is achieved by searching the amount of wafer in production for the client B, the predetermined amount of wafer for specific clients and the ATP amount of wafer.